



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,410	10/15/2003	Shunpei Yamazaki	0756-7211	7762

31780 7590 05/03/2004

ERIC ROBINSON

PMB 955

21010 SOUTHBANK ST.

POTOMAC FALLS, VA 20165

EXAMINER

KOSLOW, CAROL M

ART UNIT

PAPER NUMBER

1755

DATE MAILED: 05/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/684,410

Applicant(s)

YAMAZAKI ET AL.

Examiner

C. Melissa Koslow

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/667,493.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1755

Applicant's election without traverse of a species in the paper dated 12 March 2004 is acknowledged. The election of species is withdrawn due to applicants' amendments to the claims of 12 March 2004.

Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows:

An application in which the benefits of an earlier application are desired must contain a specific reference to the prior application(s) in the first sentence of the specification of in an application data sheet (37 CFR 1.78(a)(2) and (a)(5)). The specific reference to any prior nonprovisional application must include the relationship (i.e., continuation, divisional, or continuation-in-part) between the applications except when the reference is to a prior application of a CPA assigned the same application number.

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "105" in figure 1 has been used to designate the electrode and the compound under the EL layer. A proposed drawing correction or corrected drawings are required in reply

Art Unit: 1755

to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "105" and "106" have both been used to designate the compound under the EL layer. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "324d" discussed on page 21 of the description is not found in figure 3B. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The disclosure is objected to because of the following informalities:

The formulas mentioned on page 5 are not given on this page. They are located on a separate page which does not have a page number. Applicants should either give the formula on page 5 or make reference to the page with the formulas on it and give this page a page number. It is noted that the patent resulting from parent is missing the formula page because there was no page number and thus the page was not considered as part of the disclosure. Appropriate correction is required.

Claims 5-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant

Art Unit: 1755

art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There is no support in the specification for the amended subject matter of claims 5-12.

There is no disclosure of a process for making a digital camera in the specification. The disclosed method of making an EL display device and the statement that such a device can be used in a digital camera does not provide support for the claimed method of making a camera. The subject matter of these claims is new matter.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-4 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 and 11-19 of U.S. Patent No. 6,641,933 in view of U.S. patents 6,300,612 and 6,661,454.

Claims 3, 6, 9, 13, 16 and 19 of Patent No. 6,641,933 teaches electronic apparatus that contain a EL display device, wherein the display device comprises pixels provided with a light-emitting element which comprises a thin film including a light-emitting organic compound and that an ionic impurity concentration of at most 0.1 ppm or at most 0.01 ppm. Claims 2, 5, 8, 12,

Art Unit: 1755

15 and 18 define the ionic impurities as being sodium or potassium. The apparatus is not defined in the claims, but applicants define the apparatus in column 20, line 66 through column 21, line 65. This list includes digital camera. U.S. patents 6,300,612 and 6,661,454 also teach digital cameras conventionally contain a EL display device, wherein the display device comprises pixels provided with a light-emitting element which comprises a thin film including a light-emitting organic compound. Therefore it would have been obvious to select a digital camera as the apparatus discussed in the claims of Patent No. 6,641,933.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patents 6,300,612 and 6,661,454 in view of U.S. patent 6,617,051.

U.S. patents 6,300,612 and 6,661,454 teach digital cameras conventionally contain a EL display device, wherein the display device comprises pixels provided with a light-emitting element which comprises a thin film including a light-emitting organic compound. They do not teach the purity of the thin film including a light-emitting organic compound. U.S. patent 6,617,051 teaches EL devices where the thin film including a light-emitting organic compound has an impurity concentration of less than 1000 ppm and the examples show that the film is free of sodium or potassium. U.S. patent 6,617,051 teaches the films having the taught impurity concentration have a longer emission life and an improved emission luminescence. Accordingly, one of ordinary skill in the art would have found it obvious to use the EL displays discussed in

Art Unit: 1755

U.S. patent 6,617,051, which having a longer emission life and an improved emission luminescence, than those not having the that impurity concentration, as the displays in the cameras of U.S. patents 6,300,612 and 6,661,454. The reference suggests the claimed cameras.

It is requested that applicants provide some information as to standard, conventional or acceptable amount of ionic impurities in the light-emitting compounds used in EL displays. The article by Zou et al indicates it is known to use highly pure compound to minimize the amount of ionic impurity in these compounds, but the amount present is not discussed. The requested information will allow for a proper comparison between the prior art and the claimed invention.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at (571) 272-1362.

The fax number for all official communications is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmk
April 29, 2004


C. Melissa Koslow
Primary Examiner
Tech. Center 1700